Document Type: EA-Administrative Record

Index Field: FONSI

Project Name: TWRA Yuchi Refuge

Project Number: 2005-139

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

SECTION 26a APPROVAL OF SUBIMPOUNDMENTS FOR YUCHI WILDLIFE REFUGE

Proposed Action and Need

The Tennessee Wildlife Resources Agency (TWRA) has submitted a Section 26a (of the Tennessee Valley Authority [TVA] Act) application to construct and operate subimpoundments and associated water control structures at the Yuchi Wildlife Refuge. Yuchi Refuge is part of the TWRA Yuchi Wildlife Management Area (WMA)—a 2,475acre tract located on Smith Bend of the Tennessee River in Rhea County, Tennessee. Approximately 1,475 acres of the WMA are upland forest, and the remaining 1,000 acres consists of river bottom agricultural fields, upland fields, and wetlands. TWRA proposes to place 2,954 cubic yards of fill in approximately 0.75 acre of wetland to create one subimpoundment structure. In addition, TWRA proposes to place 3,033 cubic yards of fill material (including 1,321 cubic yards of fill material below elevation 682.5) at four other locations in unnamed tributaries to the Tennessee River (near Tennessee River Miles 521.8-523.7, right bank) to create additional subimpoundment structures. Pool elevations of the subimpoundments would range from 682.5 to 690 feet mean sea level (msl), and seasonally impound up to 91 acres at full pool. The impoundments would serve as a periodic refuge (November to February) for wintering migratory waterfowl. Except for this period of operation, water would be allowed to flow through the structures without impediment.

Alternatives

Under the No Action Alternative, no water control structures would be constructed at the Yuchi Refuge. The current land use would most likely continue with other TWRA wildlife management activities. Under the Action Alternative, TWRA would construct water control structures as stated above to construct the subimpoundments. Rainfall and runoff would be captured to flood the lower elevations of agricultural fields during low winter water levels on Chickamauga Reservoir and create impounded pools totaling approximately 91 surface areas at maximum subimpoundment pool elevations of 690 feet msl. The impounded areas would serve as a waterfowl refuge with no hunting allowed.

Impacts Assessment

TWRA prepared an Environmental Assessment (EA) in February 2004 for the proposed development of the impoundments to support their Section 404 and Section 26a permit applications. The U.S. Army Corps of Engineers (USACE) prepared an EA dated October 20, 2005, which evaluated the environmental impacts of the proposed TWRA subimpoundments and associated water control structures. TVA was a cooperating agency in the EA preparation and has decided to adopt the USACE EA.

If the No Action Alternative were adopted, the waterfowl subimpoundments and associated water control structures would not be built and, therefore, there would be no impacts. If the proposed Action Alternative were completed, TWRA would construct and

operate the water control structures and subimpoundments at the Yuchi WMA. No threatened or endangered species would be affected by this undertaking. Based on review of the proposed subimpoundment locations, haul roads identified by TWRA, and borrow sites for fill material, impacts to all historic properties identified on the Yuchi Refuge lands would be avoided by the proposed action. Insignificant impacts to terrestrial and aquatic resources would occur as a result of construction and operation of the subimpoundments. Wintering migratory waterfowl would benefit from a significant area providing food resources, resting habitat, and refuge from hunting and other forms of human disturbance. Because the proposed subimpoundments will only be operated seasonally during the period of low winter water levels on Chickamauga Reservoir, and the highest impoundment elevations will be limited to elevation 690 msl. loss of flood control storage and loss of power storage would be minimized and therefore meet TVA's criteria established for acceptable waterfowl subimpoundments. Approximately 280 feet (approximately 70 feet at each location) of the four intermittent stream substrate locations would be permanently filled with borrow material for the construction of the water control structures. Potential impacts to water quality and aquatic ecology should remain at insignificant levels with proper construction and operation of the subimpoundments. Wetland impacts would involve the fill of 0.75 acre of low-quality wetlands, would be minimal, and would be appropriately mitigated.

Mitigation

Authorization of TWRA to place fill in 0.75 acre of low-quality wetlands would be mitigated by restoration of 3.0 acres of wetlands on site. TWRA has developed a mitigation plan (USACE EA, Appendix C) for development and monitoring of the 3.0 acres of wetland.

TVA would also require construction-related best management practices to reduce water quality impacts to insignificant levels.

Public and Intergovernmental Review

A Joint Public Notice (05-36) was published on June 9, 2005, advertising the proposal.

The U.S. Fish and Wildlife Service responded to the public notice by letter dated July 19, 2005, stating that based on their records, there are no federally listed or proposed endangered or threatened plant or animal species in the impact area of the project and that requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. No significant adverse effects to fish and wildlife, their habitats, and human uses thereof are expected to result from the proposed work.

The Tennessee Historical Commission (THC) responded to the public notice by letter dated June 15, 2005, requesting a copy of the archaeological survey of the permit area for their review. On July 18, 2005, the THC responded that based on the documentation submitted, no historic properties will be affected and the project as proposed complies with Section 106 of the National Historic Preservation Act.

The Federal Emergency Management Agency responded to the public notice by letter dated June 20, 2005, stating that any introduction of fill placement in the streams should avoid possible impacts on floodways. There are no designated floodways in the river reach and Rhea County did not require the applicant to complete any studies related to the proposal.

The Tennessee Department of Environment and Conservation provided a copy of the 401 Water Quality Certification issued to TWRA on August 4, 2005, certifying that water quality standards would not be violated if the proposed work is conducted in accordance with the certification.

Conclusion and Findings

TVA has independently reviewed the impacts assessed in the USACE EA and determined the scope, alternatives considered, and content are adequate and that impacts on the environment have been adequately assessed. TVA has evaluated the project for compliance with Executive Order 11988 and has determined that there is no alternative other than fill in the floodplain, which would enable development of the subimpoundments. There are no threatened or endangered species present. There are no historic properties that will be affected by the undertaking. Wetland mitigation proposed will reduce wetland impacts to insignificant levels.

Based on the USACE EA, we conclude that the Section 26a approval for the water control structures would not be a major federal action significantly affecting the environment. Accordingly, an Environmental Impact Statement is not required. This Finding of No Significant Impact is contingent upon successful completion of a wetland mitigation plan required by the USACE Section 404 permit of November 3, 2005, compliance with the provisions of the August 4, 2005, Section 401 Water Quality Certification, and TVA's standard Section 26a approval conditions for water quality protection.

November 15, 2005

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Date Signed